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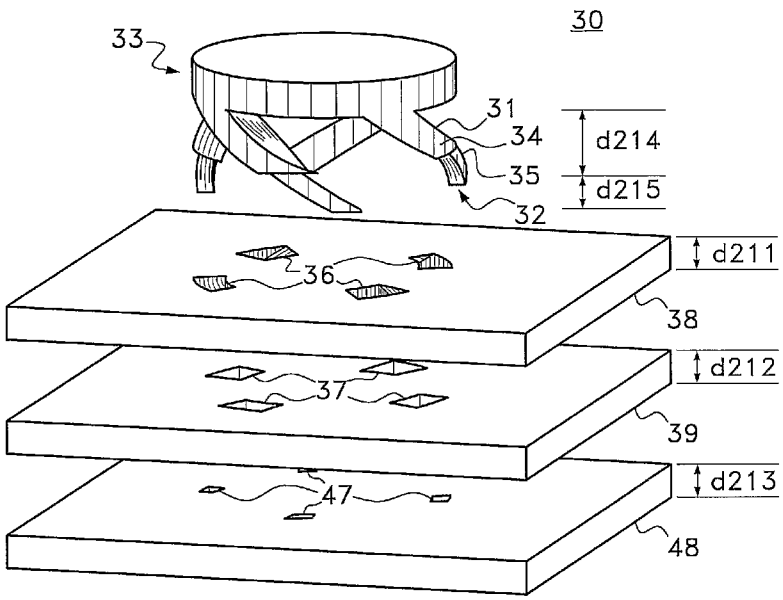
(54) Title: ROTARY FASTENER, FASTENABLE MATERIAL, FASTENER SYSTEM, AND STORAGE SYSTEM



(57) Abstract: A short turn rotary fastener that comprises a helical prong, a fastenable material that comprises a prong receptor, a fastener system that comprises a short turn rotary fastener and a fastenable material, and a storage system comprised of a short turn rotary fastener and fastenable materials in the form of a shelf and a support. The prong can be self-tapping to allow for the absence of a prong receptor in a material. A prong can have a thickened portion to limit the penetration of the fastener into the material. Multiple prongs may be joined by a connector. The fastener may have a rotating mechanism such as a shape change metal or a lever to engage or disengage the fastener. A fastenable material can be a variety of items such as a block, a bar, a connector, or a support piece.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/22732

A. CLASSIFICATION OF SUBJECT MATTER
IPC: **F16B 21/02**(2006.01),**A47B 47/00**

USPC: 403/348,349,353;108/180,181,190.192.193,153.1,157.13;312/110.111;411/457,442,443,444
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 403/348, 349, 353: 108/180, 181, 190, 192, 193, 153.1, 157.13; 312/110, 111; 411/457, 442, 443, 444

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2,138,576 A (GEBERT) 29 November 1936 (29.11.1936), see entire document.	1-45
A	US 2,730,419 A (WATROUS et al) 10 January 1956 (10.01.1956), see entire document.	1-45
A	US 4,474,489 A (SIMON) 02 October 1984 (02.10.19840, see entire document.	1-45
X	US 4,518,277 A (BUSH et al) 21 May 1985 (21.05.1985), see entire document.	17
A	US 4,711,596 A (BRUDERER) 08 December 1987 (08.12.1987), see entire document.	1-45
A	US 5,651,570 A (SCHRUM et al) 29 July 1997 (29.07.1997), see entire document.	1-45

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,624,167 A (KATZ) 29 April 1997 (29.04.1997), see entire document.	1-15, 18-33, 35-44 --- 34, 45
Y	US 5,941,183 A (MING-SHUN) 24 August 1999 (24.08.1999), see entire document.	34, 45
X	US 6,520,464 B1 (MORRISSEY et al) 18 February 2003 (18.02.2003), see entire document.	15, 16